Technical Directive

SES3 BPA TDD 6

Document: Title:

Spatial Data and Modelling Support for Ecological Effects Branch Research

Task Order:

SAVCS3 Task Order

Relevant Areas: 2.1, 2.5, cross functional areas

Location

Western Ecology Division, Corvallis, OR

Technical Monitors	Bhagya Subramanian
LCO	ORD/OSIM/ASB
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Overview:

The Environmental Protection Agency (EPA), Office of Research and Development (ORD), has a requirement for spatial data and scientific modelling support for employees located at the National Health Effects and Environmental Research Laboratory (NHEERL) Western Ecology Division (WED) laboratory in Corvallis, Oregon. The work described here is designed to provide ORD with spatial and modelling support services.

Purpose and Scope:

The purpose is to provide technical expertise not presently available within the federal work force at the Western Ecology Division (WED), specifically in the areas of object-oriented programming and model development support.

Contractors shall provide the following: (1) develop program source code for wildlife population modelling; (2) provide documentation and user instructions for models, systems, databases, and procedures, and (6) provide QA/QC for spatial data and modelling tasks.

All work is to be performed within the general requirements and tasks as outlined in this TDD. The contractor shall provide an estimate for work described here.

Technical Experience:

Modelling Experience:

Demonstrated mastery of object-oriented programming and design practices, as evidenced by: M.S., M.A. in computer science or related disciplines; at least 5 years of on-the-job experience in developing and implementing object-oriented software; experience in the analysis and implementation of scientific algorithms; experience in GUI development; documentation and QA/QC skills, particularly for developing and maintaining permanent metadata archives.

Successful completion of these tasks will require regular and extensive face-to-face meetings with the EPA Technical Monitor and Principal Investigators. The work conducted to date has required such meetings every day or two, consistently over a period of many years. As the model development work moves towards the final completion of the project, such meetings will become even more critical. In addition, given the complexity of the source code, design options and QA activities are often conducted with EPA staff looking on and providing real-time feedback.

TDD Tasks:

WESP Spatial Data and Modelling Support:

Task 1: ETP Modelling:

Programming support shall target the ongoing construction and improvement of the PATCH model interface. EPA scientists will routinely meet with contract staff to discuss the scientific concepts which the model must incorporate, the design of the GUI, and the technical feasibility of specific implementation models.

Specific requirements for the model interface, and the coding standards which must be met, will be provided using individual work requests. These objectives will involve adding features to an existing computer model that is already large and complex, and that has been built using modern sophisticated programming techniques. Thus it will be necessary that contract staff working on these objectives have skill levels that are, at minimum, equivalent to those who have developed the existing code.

Requirements:

- 1. Experience in using the C++ standard library and its container classes.
- 2. Experience with object-oriented design practices.
- 3. Experience in GUI development using NET 2.0 Windows Forms.

Task 1 - Preparation of spatial data for the modelling

The contractor shall provide assistance for formatting and uploading georeferenced data in support of EPA's application of a decision support framework linking the VELMA ecohydrology model and the ENVISION decision support tool to the Willamette Basin and Flint Hills Ecoregion. Specific tasks shall include:

- Reformat geo-referenced data and data layers (e.g., convert ArcGIS to ASCII grids, or vice versa, as necessary) to be compatible with the linked ENVISION-VELMA framework. EPA will supply all geo-referenced data as either ArcGIS files or ASCII files.
- Upload the reformatted geo-referenced data to the ENVISION-VELMA decision support framework in support of modelling research conducted by EPA for the Willamette Basin and Flint Hills Ecoregion. These georeferenced data layers shall include geology, land surface elevation (DEM), soils (SSURGO and STATSGO), climate (daily minimum and maximum temperatures, precipitation, and solar radiation), land use, and land cover.

Task 2 – Programming and Modelling Support:

The contractor shall provide programming support for EPA's application of the linked ENVISION-VELMA decision support framework to the Willamette Basin and Flint Hills Ecoregion. Specific modelling support tasks shall include:

- 1. Develop program source code to control the bi-directional exchange of information between VELMA with ENVISION. At user-defined time periods (e.g., 1 day to 1 year) during a model simulation, the source code shall enable the transfer of (1) geo-referenced data (land use, land cover, climate, etc.) from ENVISION to VELMA, and (2) ecohydrological model output from VELMA to ENVISION. Figure 1 provides is a conceptual diagram describing the functions of the source code for managing the exchange of information between VELMA and ENVISION. This task will require expertise in object-oriented programming principles, and broad familiarity with a variety of programming languages (C++ and PROCESSING), and/or the ability to quickly learn new programming languages.
- 2. Assist EPA staff in applying and testing the linked VELMA-ENVISION framework across a wide range of spatial scales (first-order catchments to basin-scale watersheds) within the Willamette Basin and Flint Hills Ecoregion. This task will involve developing program code for running VELMA-ENVISION interactively with appropriate GIS databases supplied by EPA. The goal here will to efficiently manage input/output files (ENVISION to VELMA, and VELMA to ENVISION) at appropriate time steps (daily to annual, depending on the application) to facilitate subsequent tabular, graphical and visual analysis and visualizing model output within ENVISION.

4. Competence with managed C++ in Visual Studio 2005.

5. Familiarity with XML functionality of NET 2.0 and Xerces. Familiarity with the application of design patterns.

6. Familiarity with development practices for maximizing maintainability.

7. Documentation skills.

Deliverables:

 Improve the model interface (GUI) tools for converting bitmap data to hexagon maps, add hexagon editing features, etc. The TM will identify the components of this deliverable due within the one-year period of performance of this TDD.

2. Improve the model interface (GUI) tools used to add and edit traits and trait values. The TM will identify the components of this deliverable due within

the one-year period of performance of this TDD.

 Implement GUI trait wizards for setting up Available Resources and other commonly used trait strategies. The TM will identify the components of this deliverable due within the one-year period of performance of this TDD.

4. Make overall improvements to the model interface (GUI), including the addition of new features, and the enhancement and standardization of existing features, The TM will identify the components of this deliverable due within the one-year period of performance of this TDD.

5. Other GUI-related enhancements as needed. The TM will identify the components of this deliverable due within the one-year period of performance of this TDD.

Acceptance Criteria:

- 1. Source code is complete, technically accurate, clear, and includes information identified in Work Requests issued by the Technical Monitor.
- Usability of model features and interface is documented, tested, and presented to Technical Monitor within the time frame identified in Work Requests issued by the Technical Monitor.
- 3. Implementation designs are thorough, complete, and during their creation, are regularly presented to the Technical Monitor at time intervals identified in Work Requests issued by the Technical Monitor.

4. Source code documentation meets the written specifications issued in Work Requests issued by the Technical Monitor.

5. Quality assurance plans are thorough and complete, and are presented to the Technical Monitor within the time frame identified in Work Requests issued by the Technical Monitor.

Programming and Spatial Data Support for Linking the VELMA Ecohydrology Model to the ENVISION Decision Support Tool:

The objective of this task will be to provide programming and spatial data support for the application of a linked ecohydrology/decision support framework (ENVISION-VELMA) to the Willamette Basin of Oregon (~30,000 km²) and the Flint Hills Ecoregion of Kansas (~25,000 km²).

- 4. Competence with managed C++ in Visual Studio 2005.
- 5. Familiarity with XML functionality of NET 2.0 and Xerces. Familiarity with the application of design patterns.
- 6. Familiarity with development practices for maximizing maintainability.
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- 2. Upload the reformatted geo-referenced data to the ENVISION-VELMA decision support framework in support of modelling research conducted by EPA for the Willamette Basin and Flint Hills Ecoregion. These geo-referenced data layers shall include geology, land surface elevation (DEM), soils (SSURGO and STATSGO), climate (daily minimum and maximum temperatures, precipitation, and solar radiation), land use, and land cover.

Task 2 – Programming and Modelling Support:

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- 1. Develop program source code to control the bi-directional exchange of information between VELMA with ENVISION. At user-defined time periods (e.g., 1 day to 1 year) during a model simulation, the source code shall enable the transfer of (1) geo-referenced data (land use, land cover, climate, etc.) from ENVISION to VELMA, and (2) ecohydrological model output from VELMA to ENVISION. Figure 1 provides is a conceptual diagram describing the functions of the source code for managing the exchange of information between VELMA and ENVISION. This task will require expertise in object-oriented programming principles, and broad familiarity with a variety of programming languages (C++ and PROCESSING), and/or the ability to quickly learn new programming languages.
- 2. Assist EPA staff in applying and testing the linked VELMA-ENVISION framework across a wide range of spatial scales (first-order catchments to basin-scale watersheds) within the Willamette Basin and Flint Hills Ecoregion. This task will involve developing program code for running VELMA-ENVISION interactively with appropriate GIS databases supplied by EPA. The goal here will to efficiently manage input/output files (ENVISION to VELMA, and VELMA to ENVISION) at appropriate time steps (daily to annual, depending on the application) to facilitate subsequent tabular, graphical and visual analysis and visualizing model output within ENVISION.

- 3. Robustness of the VELMA-ENVISION software code and implementation design (applicability across the Willamette Basin and Flint Hill Ecoregion).
- 4. Quality and sufficiency of the source code documentation.
- 5. Value of the QA/QC activities.

Terms and Conditions

All terms and conditions specified in the SAVCS3 Task Order and SES3 BPA are applicable to this TDD.

- 3. Robustness of the VELMA-ENVISION software code and implementation design (applicability across the Willamette Basin and Flint Hill Ecoregion).
- 4. Quality and sufficiency of the source code documentation.
- 5. Value of the QA/QC activities.

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Requirements:

- 1. Requirements for data preparation for modelling:
 - a. M.S. or M.A. in geo-referenced data or data layers (GIS) certificate program involving geography, natural resources, earth sciences, environmental sciences, landscape planning, or related field;
 - b. Demonstrated mastery of all major functions in Arc software, including model builder and Python scripting (ArcGIS 9.x);
 - c. Demonstrated mastery in acquiring, analyzing and using remotely sensed data, especially LIDAR, in combination with other data sources.
- 2. Modelling task requirements:
 - a. Demonstrated mastery of object-oriented programming and design practices, including M.S., M.A. in computer science or related disciplines, and at least 5 years of on-the-job experience in developing and implementing object-oriented software;
 - b. Experience in the analysis and implementation of scientific algorithms;
 - c. Experience with PASCAL (DELPHI), MATHEMATICA, PROCESSING, or the ability to quickly learn and apply these software languages;
 - d. Experience in GUI development using object oriented languages such as those listed above;
 - e. Documentation and QA/QC skills, particularly for developing and maintaining permanent metadata archives.

Deliverables:

- Format and upload existing Willamette Basin and Flint Hills spatial data layers to ENVISION. All spatial data for this deliverable will be supplied by EPA. Very little or no program code will need to be developed for this step, as ENVISION already has this capability. Due no later than October 29, 2010.
- 2. Develop the software for automating the linkage of the VELMA and ENVISION models. The software shall be designed to manage the exchange of information between VELMA and ENVISION, as shown in Figure 1. In Work Requests issued by the Technical Monitor, the TM will identify the components of this deliverable due within the 5-month period of performance.
- 3. Provide programming support to EPA scientists for applying the linked VELMA-ENVISION framework to the Willamette Basin and Flint Hills Ecoregion. In Work Requests issued by the Technical Monitor, the TM will identify the components of this deliverable due within the 5-month period of performance.

Acceptance Criteria:

- 1. Quality, documentation, and usability of spatial data layers.
- 2. Usability of the linked VELMA-ENVISION framework features and interface.

- 3. Robustness of the VELMA-ENVISION software code and implementation design (applicability across the Willamette Basin and Flint Hill Ecoregion).
- 4. Quality and sufficiency of the source code documentation.
- 5. Value of the QA/QC activities.

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OMB NO: Expires: 9000-0136 09/30/98

SES 3 Air Quality Simula: n Models (AQS)

Contract: GS-35F-4381G, Task Order: 1522

Lead PR Number: PR-HQ-09-12353

Summary Information

Title: SES 3 TO 1522 Air Quality Simulation Models (AQS)

Period of Performance: From: 05/31/09
To: 05/31/15
Award Date: 05/22/09
Total Funding: \$695,622.00

Accounting/Appropriation Data

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Funding Breakout

Acct.Info	Funding Category	Amount
FY2008 - J3A553	Fixed Price	\$170,000.00
	Total:	\$170,000.00
FY2008 - U3A615	Fixed Price	\$441,622.00
	Total:	\$441,622.00
FY2008 - U3A632	Fixed Price	\$84,000.00
	Total:	\$84,000.CO

Procurement Management Roles

TASK ORDER PROJECT OFFICER:

U.S. E.P.A.

Attn: WILLIAM G. BENJEY RESEARCH TRIANGLE PARK

RTP, NC 27711

Mail Code: E243-04

Phone Number: (919) 541-0821

Fax Number:

E-Mail Address: benjey.william@epa.gov

ALTERNATE TASK ORDER PROJECT OFFICER:

U.S. E.P.A.

Atth: LYNNE M. PETTERSON RESEARCH TRIANGLE PARK

RTP, NC 27711

Mail Code: D343-04

Phone Number: (919) 541-3582

Fax Number:

E-Mail Address: petterson.lynne@epa.gov

Task Order Totals

Page: 3

SES 3 Air Quality Simulation Models (AQS) Contract: GS-35F-4381G, Task Order: 1522

Lead PR Number: PR-HQ-09-12353

Category	POP	Amount
Fixed Price	Base Pd.	\$1,486,476.61
Fixed Price	Option 1	\$1,513,842.57
Fixed Price	Option 2	\$1,559,043.84
Fixed Price	Option 3	\$1,605,527.22
Fixed Price	Option 4	\$1,653,395.05
Fixed Price	Option 5	\$1,694,552.31

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Public reporting burden for this collection of information is estimated to average 45 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the FAR Secretariat (VRS), Office of Federal Acquisition Policy, GSA, Washington, DC 20405.

OMB NO: Expires:

9000-0136 09/30/98

SES3 1530 OTAQ CISD IT Projects

Contract: GS-35F-4381G, Task Order: 1530

Summary Information

Title: SES3 1530 OTAQ CISD IT Projects

Period of Performance: From: 09/11/09

To: 09/10/10

Award Date: 09/11/09 \$375,000.00 Total Funding:

Accounting/Appropriation Data

POF DCN	BFYS Appr	.# Org	Program Element	Site/ Project	Cost Org	Cbj Clss	/ Amount C	
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Lead PR Number: PR-HQ-09-14018

Funding Breakout

Acct.Info	Funding Category	Amount
FY2009 - CBD168	Fixed Price	\$375,000.00
		
	Total:	\$375,000.00

Procurement Management Roles

TASK ORDER CONTRACTING OFFICER'S REPRESENTATIVE:

U.S. E.P.A.

Attn: CHRISTINE MIKOLAJCZYK

2565 PLYMOUTH ROAD ANN ARBOR, MI

Mail Code: AAPTIG

Phone Number: (734) 214-4403

Fax Number:

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ALTERNATE TASK ORDER CONTRACTING OFFICER'S REPRESENTATIVE:

U.S. E.P.A.

Attn: SANDRA E. SOMOZA 2565 PLYMOUTH ROAD ANN ARBOR, MI

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Task Order Totals

Category	POP	Amount
Fixed Price	Option 1	\$3,705,889.01

Page: 3

SES3 TO 1530 OTAQ CISD IT Projects GS-35F-4381G

CLIN	Schedule of Supplies/Services	Qu	antity	Unit	Amount
0004					
0001	BASE	1	ⁱ JOB	:\$3,	705,889.01
	Period of Performance: 09/11/09 – 09/10/10				
	Labor Hourse NTE: 48,000			i	
0000	Ceiling NTE:\$3,705,889.01	100			
0002	Option Period I	1	JOB	S3,7	787,986.65
	Period of Performance:09/11/10 – 09/10/11				
	Labor Hourse NTE: 48,000		1		
	Ceiling NTE: \$3,787,986.65	J.—.	ļ		2-
0003	Option Period II	1	JOB	:\$3,	827,959.56
	Period of Performance: 09/11/11 – 09/10/12				
	Labor Hourse NTE: 48,000				
0004	Ceiling NTE:\$3,827,959.56	-			0.00000
0004	Option Period III	1	JOB	:\$3,	940,899.84
	Period of Performance: 09/11/12 – 09/10/13				
	Labor Hourse NTE: 48,000	i			
	Ceiling NTE:\$3,940,899.84	1-			
0005	Option Period IV	1	JOB	\$4,0	068,696.68
	Period of Performance: 09/11/13 – 09/10/14			ļ	
	Labor Hourse NTE: 48,000				
	Ceiling NTE: \$4,068,696.68				
0006	Option Period V	1	JOB	\$4,1	70,378.80
	Period of Performance: 09/11/14 – 09/10/15				
	Labor Hourse NTE: 48,000				
	Ceiling NTE: \$4,170,378.80				

OTAQ Compliance Information Services Performance Work Statement

BACKGROUND

Legal Authority

The U.S. Environmental Protection Agency's Office of Transportation and Air Quality (OTAQ), Compliance and Innovative Strategies (CISD), is responsible for developing, implementing, and determining compliance with regulations concerning motor vehicle and engine emissions and fuel economy performance. Laws governing these regulations include Title II of the Clean Air Act (CAA), the Energy Policy and Conservation Act (EPCA), and the Motor Vehicle Information and Cost Savings Act (MVICSA).

Authority
Emission standards for highway and nonroad vehicles and their fuels
Fuel economy information programs for consumers, including fuel economy labeling and the publication of an annual fuel economy guide
Renewable fuels

Regulatory Authority

EPA's vehicle and engine certification compliance and fuels program is covered by Title 40 of the Code of Federal Regulations (CFR) Part 9, 69, 80, 85, 86, 88, 90, 91, 600, 1048, 1060, 1065 and 1068 and includes management of the EPA Imports and Exports Program. The fuel economy compliance program is covered by 40 CFR Part 600. CISD's Verify system and Engine Information Management System support the compliance activities covered by these regulations.

Compliance Program Background

The United States has the most far-reaching emission control programs in the world; however, regulations in and of themselves do not achieve clean air. The goal of our compliance programs is to deliver on the regulatory promise of environmental and public health benefits by implementing emission standards covering every vehicle, engine, and gallon of fuel sold in this country and ensuring that these standards are met over the life of the product. Our program is comprehensive in tracking compliance at every stage of useful life. We work closely with industry, years before new products appear in the market, to review engineering concepts for technical viability. Later we follow up to check emissions performance by testing vehicles before production begins and again after they enter actual customer service. When necessary, we collaborate with EPA's Office of Enforcement and Compliance Assurance (OECA) to initiate enforcement actions in cases of legal violations. This comprehensive approach is critical to the success of air quality improvements. Collectively, our four most recent major programs have air quality and public health benefits that are projected to exceed \$180 billion annually by 2030. The data presented in this report highlight four important areas in EPA's oversight of vehicle and engine emissions.

CISD develops, implements, and determines compliance with regulations concerning motor vehicle and engine emissions and fuel economy performance under the CAA, EPCA, and MVICSA. These activities require the evaluation and testing of motor vehicles and engines, the review and auditing of manufacturer emission and fuel economy tests, the review of manufacturers' applications for certification, the issuance of certificates of conformity, the calculation and approval of fuel economy label values, and the calculation of Corporate Average Fuel Economy (CAFE). This involves the production, collection, and management of a variety of technical, legal, and economic data, correspondence, and reports.

The Clean Air Act requires that motor vehicles and engines must be covered by a certificate of conformity that indicates compliance with the emission standards set forth in the Act before they can be distributed or offered for sale in the United States. The Clean Air Act also requires that imported vehicles and engines have an EPA Certificate of Conformity unless exempted or excluded by EPA or authorized jointly by EPA and U.S. Customs and Border Patrol. In addition to EPA requirements, importers of non-conforming vehicles must comply with the requirements of the U.S. Department of Transportation as well as U.S. Customs and Border Patrol. In addition, in 1987 EPA implemented regulations authorizing that Independent Commercial Importers be given manufacturer status thereby allowing them to being vehicles into conformity and certify vehicles subject to the same regulations as small volume manufacturers.

SES3 TO 1530 OTAQ CISD IT Projects GS-35F-4381G

Program/Rule	Affected Industries/Vehicles	Effortine Model Year	Description
Tier 2 Emission Standards and Gasoline Sulfur Control	Cars and Light Trucks	2004	Establishes a more stringent set of emission standards that applies to both cars and light trucks regardless of fuel type
Heavy-Duty Highway Rule	Trucks and Buses	2007	Establishes more stringent exhaust emission standards and requires ultra- low sulfur diesel (ULSD) fuel (15 ppm maximum)
Tier 4 Nonroad Diesel Rule	Construction and Agriculture Equipment	2008 (for emissions) 2010 (for fuel)	listablishes more stringent exhaust emission standards and requires ULSD fuel (15 ppm maximum)
New Emission Standards for Large Spark-Ignition (SI) Engines	Forklifts and Generators	2004 (Tier 1) 2007 (Tier 2)	Establishes new emission standards, plus requirements for in-use emission testing and computerized diagnostics
New Nonroad St Engines, Equip- ment, and Vessels	Eawn and Garden Equipment Boats and Personal Watercraft	2012 (Class I) 2011 (Class II) 2010	Establishes more stringent exhaust emission and fuel permeation standard for small SI engines below 19 kilowatts and new evaporative emission standards for inboard, outboard, stern-drive and personal watercraft engines
Tier 3 and 4 Emission Standards for Marine Diesel Engines	Commercial and Recreational Boats and Ships	2009 (Tier 3) 2014 (Tier 4)	Establishes more stringent exhaust emission standards for newly built engines; requires highly efficient, advanced emission control technology; and establishes first exhaust emission standards for remanufactured engines
Tier 3 and 4 Emission Standards for Locomotive Diesel Engines	Commercial Trains	2011 (Tier 3) 2015 (Tier 4)	Establishes more stringent exhaust emission standards for newly built engines; requires highly efficient, advanced emission control technology; and establishes first exhaust emission standards for remanufactured engines
New Emission Standards for Commercial Aircraft Jet Engines	Commercial Aircraft Engines	2005	Establishes more stringent exhaust emission standards for engines certified after 2005
Tier 1 and 2 New Emission Standards for Motorcycles	On-Highway Motorcycles	2006 (Class I and II) 2006 (Class III, Tier 1) 2010 (Class III, Tier 2)	Establishes new exhaust and evapora- tive emission standards for all displace- ments

			Pr	Pre-Production		Production		Post- Production
	Industry Secto	r	Certification	Confirmatory Testing	Fuel Economy	Production Line Testing	Selective Enforce- , ment Audits	In-Use
On-Road	Light-Duty i	Cars, pickup trucks, sport utility vehicles (SUVs)	~	•				V
		Motorcycles						
	Heavy-Duty	Trucks and buses	~					~
Nonroad	Gasoline-Powered	Lawn and garden equipment, locomotives, and marine vessels	v	•		~		V
	Diesel-Powered	Construc- tion and agriculture equipment	V	· •				~

Each model year, CISD receives over 470 certification requests for light-duty vehicles (passenger cars and trucks). Additionally, CISD processes over 3,500 certificates of conformity per year for other regulated industries, including heavy-duty engines, large nonroad diesel engines, small lawn and garden equipment, marine engines, and locomotives. CISD Imports Program also receives over 500 requests which include requests for Independent Commercial Importer (ICI) certificates or certificate verification, and requests for exemptions and exclusions. CISD processes the manufacturer applications for certification and makes a determination of conformance with the CAA requirements and related regulations. If a vehicle or engine meets the prescribed emission standards, EPA issues a certificate of conformity for the engine/vehicle configuration.

CISD's certification process includes the review of applications for certification and emissions control systems durability-data, emission-data vehicle approval and processing, and certification request processing and computer support. Other activities related to the certification process include the auditing of applicants' testing and data collection procedures and laboratory correlation, as well as EPA confirmatory testing and compliance inspections and investigations related to certification.

Based on the results of and findings from the above certification process, CISD determines whether a manufacturer meets the CAA requirements so it may market its vehicles/engines for sale in the United States. For light-duty vehicles, CISD also administers a fuel economy program that includes fuel economy labels and CAFE. The fuel economy program requires EPA to 1) perform confirmatory testing of vehicles, 2) review and audit manufacturers' vehicle and engine tests, calculations, and labels, 3) provide computer processing and programming support, and 4) calculate fuel economy values.

Fuel economy testing and labeling activities provide fuel economy values and other labeling information. These labels are used by automotive manufacturers both to market their products

and meet the requirements of EPCA. CISD also oversees CAFE testing and calculation activities which are used to determine each manufacturer's compliance with the CAFE standards specified in EPCA. Annually, CISD processes approximately 1,000 fuel economy label requests and 500 CAFE calculations.

In order to automate the activities under the vehicle and engines certification and compliance programs, the EPA is developing the Verify system. The Verify system is a distributed J2EE web application (one part residing at the National Vehicle and Fuel Emissions Laboratory (NVFEL) in Ann Arbor, MI and one part at the EPA's Central Data Exchange (CDX) environment at the National Computing Center (NCC) in Research Triangle Park (RTP) which allows engine and vehicle manufacturers to submit data to the EPA and allows EPA staff to review and act upon the information. The Verify system is a multi-year development effort that currently has modules both in production and under development.

PURPOSE AND SCOPE

The purpose of this task order is to provide information technology and information technology system support for the division's information technology systems, including Verify- Vehicle and Engines Information System and Engines and Vehicles Automated Commercial Equipment System (EV-ACES) This Task Order includes elements related to IT systems development, operations, maintenance and end user support. Since the Verify system employs a wide array of both commercial and Open Source tools and technologies, the Government requires that prospective vendors have competency with the Tools and Technologies listed below:

- Oracle 10g Database
- Oracle 10g Application Server (Portal, Oracle Containers for J2EE (OC4J), Oracle Internet Directory (OID))
- Solaris Operating System
- Java Enterprise Edition (formerly J2EE)
- Spring
- JBoss Rules
- JBPM
- Struts
- XML Schema
- EPA's Central Data Exchange

Furthermore, the Government requires any solutions developed under this task order 1) are based on an understanding of EPA Information Technology (IT) infrastructure and systems engineering practices; 2) comply with the applicable Federal and Agency regulations and standards pertaining to the specific task; 3) use an appropriate level of security based on industry best practices, Federal and Agency regulations; 4) meet the performance levels and metrics associated with specific areas.

The contractor shall perform all the related requirements outlined in the SES³ BPA statement of work (SOW).

Task Order REQUIREMENTS

1. Task Order Management Task

Task 1 (and its respective subtasks) applies to all subtasks issued with this task order.

Subtask 1-1. Progress Reporting

Subtask 1-2. Financial reporting and cost tracking

Subtask 1-3. Task Order Management Plan

Subtask 1-1. Progress Reporting

The contractor shall provide progress reporting monitoring performance and finances associated with this task order. The Technical Progress Report shall address each active Technical Directive Documents (TDD) separately, give a general outline of the effort, state the percentage of work completed for the TDDs during the reporting period, and relate it to the overall effort. OTAQ CISD reserves the right to provide the format and elements of the Progress Report. It shall include the following:

- (a) The Contractor shall furnish an electronic PDF and Excel copy of the combined monthly technical and financial progress report stating the progress made, including the percentage of the project completed, and a description of the work accomplished to support the cost. Include the estimated percentage of task completed during the reporting period for each task order.
- (b) Specific discussions shall include difficulties encountered and remedial action taken during the reporting period, and anticipated activity with a schedule of deliverables for the subsequent reporting period.
- (c) The Contractor shall provide a list of outstanding actions awaiting Contracting Officer authorization.
- (d) The report shall specify financial status at the task order level as follows:
 - (1) For the current reporting period, display the amount claimed.
- (2) For the cumulative period and the cumulative task order life display: the amount obligated, amount originally invoiced, amount paid, amount suspended, amount disallowed, and remaining approved amount. The remaining approved amount is defined as the total obligated amount, less the total amount originally invoiced, plus total amount disallowed.
 - (3) For labor hours:
 - A list of employees and subcontractors, their labor categories, and the numbers of hours worked for the reporting period.
 - For the current reporting period, display the expended direct labor hours, and the total loaded direct labor costs.
 - For the cumulative task order period display: the negotiated and expended direct labor hours and the total loaded direct labor costs.
 - Display the estimated direct labor hours and costs to be expended during the next reporting period.

- Display the current dollars obligated in the task order, net amount invoiced, and remaining amounts for the following categories: Direct labor hours, total estimated cost, subcontracts by individual subcontractor, travel, program management, and Other Direct Costs (ODCs).
- Unbilled allowable costs. Display the total costs incurred but unbilled for the current reporting period and cumulative for the task order.
- For the cumulative period display: amount shown on each subtask; amount currently claimed; and remaining approved amount. The remaining approved amount is defined as: the subtask amount less total amounts originally incurred.
- Display the estimates of remaining direct labor hours and costs required to complete the task order.
- Provide a graph using a vertical axis for dollars and a horizontal axis for expenditures against the total estimated price of the task order.
- A list of deliverables for each TDD during the reporting period.
- A status listing of all requests received by the contractor during that month and all requests listed as incomplete on the previous monthly report. The numbers of hours required to complete each request shall be provided.

Subtask 1-2. Financial Reporting and Cost Tracking: In addition to standard task order reporting requirements. OTAQ requires a mechanism for providing costs and estimates at the subtask or project request level with the capability to track costs to the type of work performed as it relates to OTAQ IT systems. All costs associated with projects and work requests shall be reported in the monthly report by subtask as well as at an aggregate level, and as specified by the individual task order subtasks. All costs associated with specific project codes shall be reported in the monthly report, and as specified in the individual work request.

- Project codes shall be established before technical work begins. Work estimates shall include costs associated with each major project milestone/phase.
- All cost-tracking for work to be billed shall include information to identify the following:
 - A. Task Order Number
 - B. OTAQ's Lab or Office (L/O) for which requested work was done (WCF code)
 - C. Location to which requested work shall be charged
 - D. Task Area
 - E. Performance Work Statement Task

The last three positions are reserved for special project codes and will be specified in the subtask or documented in the Work Request System (WRS).

- Create financial reports and track costs at a detailed level and produce standard reports as well as ad hoc reports;
- Changes in established project codes must be reviewed by the Requestor, and approved by the TOCOR.
- Costs shall be included in the monthly financial report due by the 15th of the month following the month reported.
- Additional financial reporting requirements will be specified in the individual work request or technical direction document.
- Reports shall be accurate, clear, complete, timely and in accordance with the
 requirements in the work request. Information in the monthly progress reports should be
 consistent with costs identified in the associated monthly invoice and consistent with
 generally accepted accounting principles.

Subtask 1-3. Task Order Management Plan

The contractor shall prepare a Task Order Management Plan describing the technical approach, organizational resources and management controls to be employed to meet the cost, performance and schedule requirements throughout task order execution. The contractor shall employ a program management structure to ensure the efficient execution of all tasks and subtasks, and the capability to report on the status of work performed. The contractor shall use a single point of contact (POC) for all matters regarding project administration and reporting.

2. Subtask Area Requirements Task

Task 2 (and its respective subtasks) applies to all subtasks issued with this task order.

- Subtask 2-1. Consulting Services
- Subtask 2-2. System Development
- Subtask 2-3. System Maintenance
- Subtask 2-4. Configuration and Data Management Support
- Subtask 2-5. System and Database Administration and Maintenance
- Subtask 2-6. Compliance Information Services' User Support

Subtask 2.1 Consulting Services

The consulting services include the following activities:

2.1.1 Meet with other Support Teams.

The contractor shall meet with other support teams (i.e. EPA contractors, CARB, stakeholders, etc.), as directed by change control board (CCB) and project meetings(i.e. integrated project, engineering board and system release meetings, etc..) to provide information and consult on requirements, architecture, and design in support of this SOW.

2.1.2 Review Documentation.

The contractor shall review available documentation (e.g. process/architecture diagrams, requirements, design) and provide comments on them to assist in defining requirements and design if the TOCOR provides the contractor written direction to do so. The contractors' review shall be aimed at ensuring that the solutions proposed by the various support teams are consistent with EPA business practices, standards and architecture. The contractors input and comments shall (1) recommend making best use of reusable EPA components; (2) identify specific EPA standards and guidance items that have not been included but need to be used; and (3) identify requirements and design features needed to ensure adequate system security.

2.1.3 Perform analysis.

 The contractor shall perform, when provided written direction by the change control board (CCB) and project meetings(i.e. integrated project, engineering board and system release meetings, etc.,), analysis of key infrastructure components to align and integrate

2.1.4 Demonstrate and implement potential solutions.

 The contractor shall assist in demonstrating potential solutions. The contractor's demonstration may include coordination with other support teams for providing code, installing and running these potential solutions in the specified environment.

2.1.5 Documentation.

At written direction via the change control board (CCB) and project meetings(i.e. integrated project, engineering board and system release meetings, etc.,), the contractor shall provide documentation for certain consultation activities. The

documentation may include outlining options and potential solutions, review comments on provided documents, presentation documents, presentation material, etc.

2.1.6 Facilitation

 Provide facilitation for meetings that would provide structure and process to interactions so that teams work more effectively.

Subtask 2.2 System Development

Development activities include the following:

2.2.1 Document System Requirements.

 The contractor shall hold meetings and other follow-up communications with the stakeholders identified by the TOCOR to document the system requirements in a Systems Requirements Specification (SRS) and Requirements Traceability Matrix.

2.2.2 Develop System Design.

The contractor shall develop the System Design Specifications (SDS), Database
Design Specifications (DDS), XML schemas and updated Requirements Traceability
Matrix (RTM). The contractor shall leverage, as much as practical, the existing
system architecture and Agency provided services.

2.2.3 Develop Code.

The contractor shall develop the functionality listed in the SRS and SDS.

2.2.4 Testing.

- The contractor shall conduct unit and integration testing of the different components of the system. The contractor shall use test files with actual data.
- The contractor shall prepare a test plan to test the identified requirements. The contractor shall prepare a test report that identifies how the system performs against the test cases.
- The contractor shall provide support during end-to-end testing. The contractor's support shall include ensuring the specific data and system are fully operational in the pre-production environment and shall monitor the system during this testing period.
- The contractor shall perform regression testing to insure that functionality that was previously working correctly is still working in the new release.

2.2.5 Deployment.

- The contractor shall perform all duties associated with the deployment of the system, including coordinating the deployment of any pieces of the system that they do not directly deploy.
- The contractor shall provide Manufacturer and EPA user and EPA administrator guides
- The contractor shall update and revise software release notes one time for any contractor developed software. The contractor's notes shall reflect the final version of the software that is moved out of staging and development environment and deployed to the production environment.

Subtask 2.3 System Maintenance

Maintenance activities include the following:

2.3.1 Modification of Deployed Software. The contractor shall make approved modifications to deployed software. The modifications may be for the purpose of enhancing and optimization, remediating of defects, and the addition of new functionality to improve usability and applicability.

Subtask 2.4 Configuration & Data Management Support

2.4.1 The contractor shall perform Configuration and Data Management (CM) of the project software, documentations and deliverables to be developed under this PWS. This activity shall include version control on all software, cataloging, and tracking of all project documentation and tracking of all modifications and change requests to the deliverables. The contractor shall propose a CM Plan. This Plan shall cover the described activity. The Plan shall also provide for the capability of EPA programmers to check out modules from the contractors, modify them at the NVFEL, and check them back to the contractors for subsequent Product Assurance testing.

Subtask 2.5 System and Database Administration and Maintenance

System and database technologies include the following:

- Oracle 10g Database
- Oracle 10g Application Server (Portal, Oracle Containers for J2EE (OC4J), Oracle Internet Directory (OID))
- Solaris Operating System (UNIX)

System and database activities include supporting the above technologies and the following:

- 2.5.1 Install, patch/upgrade, and maintain all UNIX, database and application servers to enable system management and efficiency.
- 2.5.2 Configure all servers to meet EPA standard configuration.
- 2.5.3 Plan, implement and perform and verify system and application software and database backup and recovery.
- 2.5.4 Perform capacity planning and system performance tuning for servers and databases.
- 2.5.5 Provide a high level of customer satisfaction through the effective delivery of technical support and service programs.
- 2.5.6 Provide innovative and appropriate technical solutions to a variety of customer system/software problems and make recommendations.
- 2.5.7 Troubleshoot problems regarding the applications and development tools.
- 2.5.8 Install and maintains all databases required for development, testing, and production environments.
- 2.5.9 Control production release, database changes through the development! life cycle.
- 2.5.10 Implement and enforce security for all Oracle database instances and Unix servers.
- 2.5.11 Provide technical support to application development teams.
- 2.5.12 Enforce and maintain database constraints to ensure integrity of the database.
- 2.5.13 Troubleshoot problems regarding databases, applications and development tools.
- 2.5.14 Install and maintain UNIX and database servers required for the test, prod-production and production environments.
- 2.5.15 Perform the capacity planning and system performance tuning.
- 2.5.16 Perform instance management, resource optimization, and storage allocation.
- 2.5.17 Lead the application deployment process and integration testing on all environments.

- 2.5.18 Work with the developers to implement changes to the application and system environments.
- 2.5.19 Research, propose and implement new solutions, features, and improvements to the system environments.
- 2.5.20 Submit system (hardware/OS/DBA) changes to the Verify incident and change log.
- 2.5.21 Provide system performance plan and monitoring.

Subtask 2.6 Compliance Information Services' User Support services

The compliance information services' user support services include the following activities:

Subtask 2.6.1 User Support

The contractor shall provide user support services, as required, to the entire user community. This community is defined as submitters of information to the systems as well retrievers and analyzers of data from the systems. The current stakeholders of these systems include auto manufacturers, EPA staff, and other Federal and state agencies.

The support services include: the tracking and providing of factual answers or responses to OTAQ Compliance Information system requests, and to provide queries of the Verify database.

Task Measures: Satisfactory performance: The contractor shall report any systemic problems that would prevent achieving these measures. See Attachment B for more details.

Task Critical Success Factors:

The contractor shall:

- Always be courteous and receptive to customers
- Solve problems over the phone
- Refer systemic issues and solutions to EPA system managers
- Aggressively communicate between contractor and EPA system managers to explain and resolve problems

Subtask 2.6.2 Task Details

The CIS Help Desk telephone and e-mail service shall be open to end users each Federal business day from 8:00 a.m. to 5:00 p.m. eastern standard time; at all other times, calls shall be taken by voice mail and retrieved at the start of the next CIS Help Desk service shift. All calls shall be answered with the contractor identifying themselves as a contractor. This identification shall also be indicated on the systems voice mail and any email activity. The contractor shall also provide a help desk central phone number and email address. All help desk action requests and trouble reports shall be recorded in a manner which will allow trend analysis via an action request tracking system.

The contractor shall also be responsible for reviewing both the help desk's voice mail requests and all CIS User Support electronic communications by 8:30 a.m. daily. Upon receipt, all requests shall be entered in the electronic tracking system for analysis and immediate resolution. Actions and solutions for these requests should also be tracked in this tracking system. All transactions should be time and date stamped. The tracking system shall be accessible by EPA and exportable to Oracle RDBMS. The contractor's support staff shall

SES3 TO 1530 OTAQ CISD IT Projects GS-35F-4381G

attempt to duplicate reported problems immediately upon receipt. Emergency problems shall be responded to with a call back to the user as soon as possible, and if possible, within two hours. All other calls shall be responded to with a call back to the user no later than the next business day. Other requests shall be addressed in order of receipt and assigned to a support staff for resolution. The contractor's support staff shall have primary responsibility for maintaining and updating the request tracking system, and contacting users with an update and resolution status of all reported issues.

Types of requests will include support of manufacturers with the submission process, and query requests from EPA and other stake holders.

All requests including non-routine queries will be approved by the Contract Office Representative (COR), if the estimation to complete exceeds two hours.

In all cases, the contractor shall create the action request ticket, attempt to resolve the problem, and, as necessary, contact the appropriate EPA workgroup for final resolution.

<u>Deliverables</u>

Subtasks	Deliverable	Date Due
Subtask 1-1	Monthly Progress Reports	Monthly
Subtask 1-2	Financial Reporting and Task Tracking	Monthly
Subtask 1-3	Task Order Management Plan	10 days after receipt of SOW
Subtask 2-1	Meeting Minutes	2 days after Meeting
	Project Reports	TBD by TDD schedule
Subtask 2-2	Systems Requirement Specification	TBD by TDD schedule
	Requirements Traceability Matrix	Due after each development phase
	System/Database Design Document	TBD by TDD schedule
	XML Schemas	TBD by TDD schedule
	Delivered software code	TBD by TDD schedule
	Unit Test Report	TBD by TDD schedule
	Updated Test Plan	TBD by TDD schedule
	Regression Test Report	TBD by TDD schedule
	Deployment Plan	TBD by TDD schedule
	Manufacturer User Guide	TBD by TDD schedule
	EPA User Guide	TBD by TDD schedule
	EPA Administrator's Guide	TBD by TDD schedule
	Software Release Notes	Due 2 days after release deployment
	Updated Systems Requirement	Due 10 days after each
Subtask 2-3	Specification	maintenance release
	Updated Requirements	Due 10 days after each
	Traceability Matrix	maintenance release
:	Updated System/Database Design	Due 10 days after each maintenance release
	Document	Due 2 weeks prior to affected
	Updated XML Schemas	maintenance release
	Updated Delivered software code	TBD by TDD schedule
	Updated Unit Test Report	TBD by TDD schedule
	Updated Test Plan	TBD by TDD schedule
	Updated Regression Test Report	TBD by TDD schedule
	Updated Deployment Plan	TBD by TDD schedule
	Updated Manufacturer User Guide	TBD by TDD schedule
	Updated EPA User Guide	TBD by TDD schedule
	Updated EPA Administrator's	
	Guide	TBD by TDD schedule

SES3 TO 1530 OTAQ CISD IT Projects GS-35F-4381G

	Software Release Notes	Due 2 days after maintenance release
	Change Control Board Meeting	
Subtask 2-4	Minutes	2 days after Meeting
<u>(</u>	Change Request Reports	TBD by TDD schedule
Subtask 2-5	Backup and Recovery Plan	TBD by TDD schedule
	System Performance Plan	TBD by TDD schedule
	Monthly System Performance	1
	Report	Monthly
Subtask 2-6	Monthly Help Desk Report	Monthly
	Customer Satisfaction Surveys	TBD by TDD schedule

All deliverables will be defined in subtasks issued under this task order. All deliverables shall be provided in electronic format conforming to EPA standards. Some deliverables may need to be provided in multiple electronic format types for import or integration into EPA financial databases and project management systems or for reporting purposes and use in management dashboard web applications.

Acceptance Criteria for Deliverables:

During the review of deliverables the TOCOR shall have the right to reject or require correction of any deficiencies found in the deliverables. In the event of rejection of any deliverable, the contractor will be notified in writing by the TOCOR of the specific reasons why the deliverable is being rejected. The contractor shall have 10 calendar days to correct the rejected deliverable and return it to the TOCOR. The following list of acceptance criteria applies to all tasks.

- 1. Completeness, clarity, timeliness, organization, consistency, meets requirements, quality, grammatically correct, and technical accuracy.
- 2. Additional acceptance criteria may be specified in individual work requests.

Terms & Conditions

Contracting Officer Representatives (CORs)

CORs include the BPA Contracting Officer's Representative (BPACOR), Task Order COR (TOCOR), Alternate TOCOR (ATOCOR), and Technical Monitors (TM). Only a COR may issue TDDs, work requests, and technical direction. Only a COR may call meetings with customers, end-users, or clients. The contractor may schedule meetings with CORs. Meetings seeking technical clarification that does not involve tasking are informal in nature and do not require COR coordination.

Technical Direction

(a) The BPA Contracting Officer's Representative is the primary representative of the Contracting Officer authorized to provide technical direction on task order performance.
(b) Individuals other than the BPACOR may be authorized to provide technical direction. If individuals other than the BPACOR are authorized to provide technical direction, their names will be specified by task order or technical directive documents (TDDs) as appropriate. A TOCOR, Technical Monitor, or other designee is authorized to provide technical direction.

subject to the limitations set forth below, only on his/her task order or technical directive document.

- (c) Technical direction includes:
 - (1) Direction to the contractor which assists the contractor in accomplishing the Statement of Work.
 - (2) Comments on and approval of reports or other deliverables.
- (d) Technical direction must be within the BPA and the task order, or technical directive document statement of work. The BPACOR or any other technical representative of the Contracting Officer does not have the authority to issue technical direction which (1) institutes additional work outside the scope of the BPA, task order, or technical directive document; (2) constitutes a change as defined in the "Changes" clause; (3) causes an increase or decrease in the estimated cost of the BPA, task order, or technical directive document; (4) alters the period of performance; or (5) changes any of the other express terms or conditions of the BPA, task order, or technical directive document.
- (e) Technical direction will be issued in writing or confirmed in writing within five (5) calendar days after verbal issuance. One copy of the technical direction memorandum will be forwarded to the Contracting Officer and the BPACOR.

Other Direct Costs and Travel

(1) Other Direct Costs-Other Direct Costs (ODCs) are items which are allowable and allocable direct costs to the Task Order for which EPA may reimburse the Contractor. Such items shall be charged in accordance with the Contractor's established and accepted accounting practices except as stated below. The Task Order COR (TOCOR) may provide approval for materials and supplies up to \$500.00 (for a single item or a related group of items). For costs beyond \$500, the EPA Contracting Officer's approval is required. For ODCs requiring the Contracting Officer's approval, Contractors shall submit ODC requests via one email to the Contracting Officer, Contract Specialist and CORs as applicable.

This consent is only intended to be a determination of technical reasonableness and is not a pre-determination as to the allowability of these costs. Equipment is considered to be "facilities" for the purpose of Part 45 of the Federal Acquisition Regulation and, with certain exceptions, may not be reimbursed as a direct charge to the contract.

- (2) Travel—Travel up to \$1,000.00 for a single trip (e.g. one trip for 3 people or 1 trip for 1 person) is allowable as a charge to this Task Order with prior written consent of the TOCOR. Travel in excess of \$1,000.00 for a single trip (e.g. one trip for 3 people or 1 trip for 1 person) is not allowable as a charge to this task order without prior written consent of the Contracting Officer. Except as explicitly set forth below, the Contractor shall be reimbursed for allowable and allocable travel costs actually incurred by and paid to the Contractor's employees, provided such costs do not exceed the amount that would be payable to an employee of the Environmental Protection Agency conducting the same travel while on Government business. In determining the dollar value of allowable Contractor employee travel costs, the limitation of the Federal Travel Regulations effective on the date of travel will apply to Contractor employees to the same extent they apply to Federal Government employees.
- (a) Contractors shall submit ODC Travel Requests via one email to the Contracting Officer, Contract Specialist and CORs as applicable. Contractors shall submit the following required information per person:
 - (i) Purpose of travel
 - (ii) Mileage, including point of origin to destination locations
 - (iii) Hotel (#__nights) at Government rate \$__ per night

SES3 TO 1530 OTAQ CISD IT Projects GS-35F-4381G

(iv)	Meal per diem M&IE Government rate for	(\$_	*	days
\$_	*_days)			
(v)	- Total			

- (3) The Contractor may be required to furnish to the Contracting Officer documentary proof of every travel expenditure that exceeds twenty-five dollars (\$25), including receipts for common carrier transportation expenditures. Bona fide lodging receipts may be required to be submitted by the Contractor along with the monthly invoices.
- (4) The Contractor may elect to reimburse its employees for meals and incidental expenses (as defined in the Federal Travel Regulations) on a per diem basis, and the Contractor will be reimbursed for such payments. In no event shall the reimbursement allowed under this provision exceed the standard per diem rate for meals and incidental expenses allowable under the Federal Travel Regulations.
- (5) To the maximum extent practicable consistent with travel requirements, the Contractor agrees to use the reduced air transportation and hotel/motel rates and services provided through available Government discount air fares and lodging rates for bona fide employees' travel that is otherwise reimbursable as a direct cost pursuant to this contract when use of such rates results in the lowest overall cost. The Contractor shall submit requests, including pertinent information, for specific authorization to use these rates to the Contracting Officer.

52.217-8 Option to Extend Services

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within 30 days.

52.217-9 Option to Extend the Term of the Contract

- (a) The Government may extend the term of this contract by written notice to the Contractor within 30 days; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.
- (b) If the Government exercises this option, the extended contract shall be considered to include this option clause.
- (c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed seventy-two (72) months.

Travel Required By Contractor Staff

Contractor staff may be required to travel in support of this task order. The following shows the locations to which travel may occur.

The contractor shall generate and submit to the TOCOR, a detailed Trip Report within five working days of completing the travel. The trip report shall contain the purpose of the trip, its length, location visited, issues/information obtained on the trip, action items and

SES3 TO 1530 OTAQ CISD IT Projects GS-35F-4381G

recommendations resulting from the trip that impact the services being delivered. Also include as appropriate meeting agenda(s), meeting minutes; goals, outcomes.

City	State
Ann Arbor	MI
Washington	D.C.

TOCOR Approval of Training

The contractor shall provide and maintain a qualified staff of personnel to meet the requirements of the Statement of Work. The contractor shall provide training at no cost to government to keep its personnel abreast of changes to the science and/or technology associated with the requirements of the task order. In addition, the contractor shall ensure that its personnel receive appropriate safety, health and environmental training in accordance with Federal, state and local requirements prior to assigning any task that require such training. The contractor shall provide documentation of such training upon the request of the BPA Contracting Officer's Representative and/or Contracting Officer (CO).

The Government will not directly reimburse the cost for contractor employees to meet or maintain minimal task order requirements or to obtain and sustain an appropriate level of professionalism. Any direct charges for training will only be considered for reimbursement under this task order by compliance with the procedures set forth in the paragraph below.

There may be occasions when it is determined to be in the best interest of the Government to reimburse the contractor for the direct cost of training associated with a requirement that represents a unique Government need unrecognized at the time of task order award. When such circumstances occur, the contractor shall secure the CO prior written approval by submitting a written request to the TOCOR that includes, at a minimum the following information:

- a. Individual to be trained (Identify position and job duties under task order.)
- b. Description of circumstances necessitating the training. (Describe the specific change to the performance requirements. Identify by number and title of the task order(s) that will benefit from training and describe in detail how the training relates to the Statement of Work and job duties under the task order.)
- c. Estimated cost (Include a cost breakdown with an explanation of why this is the most cost effective means to fulfill the task order requirements.)
- d. The contractor may include a request to use Government facilities for EPA-requested training only. The use of Government facilities for any other training is prohibited.

The Contracting Officer will provide the contractor with written approval or disapproval of the request. Approval of a task order quote that includes training as an other direct cost element shall not be construed to mean the training is approved; i.e., the contractor shall obtain written approval for the training as described. Training billed as a direct cost shall be disallowed by the TOCOR unless approved.

Treatment of Confidential Business Information

- (a) The Task Order COR or his/her designee, after a written determination by the appropriate program office, may disclose confidential business information (CBI) to the Contractor necessary to carry out the work required under this task order. The Contractor agrees to use the CBI only under the following conditions:
- (1) The Contractor and Contractor's employees shall: (i) use the CBI only for the purposes of carrying out the work required by the task order; (ii) not disclose the information to anyone other than properly cleared EPA employees without the prior written approval of the Assistant General Counsel for Contracts and Information Law; and (iii) return the CBI to the TOCOR or his/her designee, whenever the information is no longer required by the Contractor for performance of the work required by the task order, or upon completion of the task order.
- (2) The Contractor shall obtain a written agreement to honor the above limitations from each of the Contractor's employees who will have access to the information before the employee is allowed access.
- (3) The Contractor agrees that these task order conditions concerning the use and disclosure of CBI are included for the benefit of, and shall be enforceable by, both EPA and any affected businesses having a proprietary interest in the information.
- (4) The Contractor shall not use any CBI supplied by EPA or obtained during performance hereunder to compete with any business to which the CBI relates.
- (b) The Contractor agrees to obtain the written consent of the CO, after a written determination by the appropriate program office, prior to entering into any subcontract that will involve the disclosure of CBI by the Contractor to the subcontractor. The Contractor agrees to include these provisions, including this paragraph (b), in all subcontracts awarded pursuant to this task order that require the furnishing of CBI to the subcontractor.

Handling Confidential Business Information (CBI)

The Contractor shall notify the Government if any situation arises where contractor personnel may have had access to confidential business information, or sensitive information. The situation shall be handled in accordance with CBI related clauses in the contract and the Contractor shall promptly deliver the material to the TOPO for appropriate action.

Release of Contractor Confidential Business Information

(a) The Environmental Protection Agency (EPA) may find it necessary to release information submitted by the Contractor either in response to this solicitation or pursuant to the provisions of this task order, to individuals not employed by EPA. Business information that is ordinarily entitled to confidential treatment under existing Agency regulations (40 C.F.R. Part 2) may be included in the information released to these individuals. Accordingly, by submission of this proposal or signature on this task order or other contracts, the Contractor hereby consents to a limited release of its confidential business information (CBI).

Government Contractor Relations

- (a) The Government and the Contractor understand and agree that the services to be delivered under this task order by the contractor to the Government are non-personal services and the parties recognize and agree that no employer-employee relationship exists or will exist under the task order between the Government and the Contractor's personnel. It is, therefore, in the best interest of the Government to afford both parties a full understanding of their respective obligations.
- (b) Contractor personnel under this task order shall not:
 - (1) Be placed in a position where they are under the supervision, direction, or evaluation of a Government employee.
 - (2) Be placed in a position of command, supervision, administration or control over Government personnel, or over personnel of other Contractors under other EPA contracts, or become a part of the Government organization.
 - (3) Be used in administration or supervision of Government procurement activities.
- (c) Employee Relationship:
 - (1) The services to be performed under this task order do not require the Contractor or his/her personnel to exercise personal judgment and discretion on behalf of the Government. Rather the Contractor's personnel will act and exercise personal judgment and discretion on behalf of the Contractor.
 - (2) Rules, regulations, directives, and requirements that are issued by the U.S. Environmental Protection Agency under its responsibility for good order, administration, and security are applicable to all personnel who enter the Government installation or who travel on Government transportation. This is not to be construed or interpreted to establish any degree of Government control that is inconsistent with a non-personal services contract.
- (d) Inapplicability of Employee Benefits: This task order does not create an employer-employee relationship. Accordingly, entitlements and benefits applicable to such relationships do not apply.
 - (1) Payments by the Government under this task order are not subject to Federal income tax withholdings.
 - (2) Payments by the Government under this task order are not subject to the Federal Insurance Contributions Act.
 - (3) The Contractor is not entitled to unemployment compensation benefits under the Social Security Act, as amended, by virtue of performance of this task order.
 - (4) The Contractor is not entitled to workman's compensation benefits by virtue of this task order.
 - (5) The entire consideration and benefits to the Contractor for performance of this task order is contained in the provisions for payment under this task order.

SES3 TO 1530 OTAQ CISD IT Projects GS-35F-4381G

- (e) Notice. It is the Contractor's, as well as, the Government's responsibility to monitor task order activities and notify the Contracting Officer if the Contractor believes that the intent of this clause has been or may be violated.
 - (1) The Contractor should notify the Contracting Officer in writing promptly, within 5 calendar days from the date of any incident that the Contractor considers to constitute a violation of this clause. The notice should include the date, nature and circumstance of the conduct, the name, function and activity of each Government employee or Contractor official or employee involved or knowledgeable about such conduct, identify any documents or substance of any oral communication involved in the conduct, and the estimate in time by which the Government must respond to this notice to minimize cost, delay or disruption of performance.
 - (2) The Contracting Officer will promptly, within 5 calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer will either:
 - (i) confirm that the conduct is in violation and when necessary direct the mode of further performance,
 - (ii) countermand any communication regarded as a violation,
 - (iii) deny that the conduct constitutes a violation and when necessary direct the mode of further performance; or
 - (iv) in the event the notice is inadequate to make a decision, advise the Contractor what additional information is required, and establish the date by which it should be furnished by the Contractor and the date thereafter by which the Government will respond.

Acronyms

AAA	Anytime, Anyplace Access
BPA	Blanket Purchase Agreement
BPACOR	BPA Contracting Officer's Representative
CAA	Clean Air Act
CARB	California Air Resource Board
CAFE	15 15 15 15 15 15 15 15 15 15 15 15 15 1
CBI	Corporate Average Fuel Economy Confidential Business Information
CDX	293 203 563 56 W W
CFR	Central Data Exchange
CISD	Code of Federal Regulations
CM	Compliance and Innovative Strategies Division
	Configuration Management
CO	Contract Officer
COB	Close of Business
COR	Contracting Officer Representative
CTS	Customer Technology Solutions
EPA	Environmental Protection Agency
EPCA	Energy Policy and Conservation Act
GFP	Government Furnished Property
GSA	General Services Administration
ICI	Independent Commercial Importer
<u> </u>	Information Technology
J2EE	Java Enterprise Edition
MVICSA	Motor Vehicle Information and Cost Savings Act
NCC	National Computing Center
NVFEL	National Vehicle and Fuel Emissions Laboratory
ODC	Other Direct Costs
O&M	Operations and Maintenance
OTAQ	Office of Transportation and Air Quality
PO	Project Officer
POC	Point of Contact
PWS	Performance Work Statement
RFG	Reformulated Gasoline
RFQ	Request for Quote
RTP	Research Triangle Park
SDS	System Design Specifications
SES ³	Software Engineering and Specialized Scientific Support
SRS	Systems Requirements Specification
sow	Statement of Work
TDD	Technical Directive Documents
TM	Technical Monitor
TO	Task Order
TOCOR	Task Order Contract Officer Representative
WCF	Working Capital Fund
WRS	Work Request System
AALCO	

OTAQ Compliance Information Services Performance Metrics

Deliverable Type	Performance Objective	Surveillance Method	Performance Measure	Performance Standard	Subtasks	Deliverable/Service Affected by Incentive	Incentive
Project Management	Effective management of the task order in comparison of actuals vs gstmates	Random sampling inspection of financial and progress reports % of deliverables the compared to workplan, budget and on time deliverable due dates, and project scheddle.	at are within	Each TDD's sublask monthly cost and schedule actuals should not be +/- 10 % over the estimate	Subtask 1	Project Management	Report positive or negative on performance report
	Deliverables are on time						•
Documentation	Documentation rated as EXCEPTIONAL. Written deliverables Random sampling must be clear, comprehensive, inspection and/or readable, and technically correct, sampling of show expertise, and be appropriate deliverable for the targeted audience.	-	The number of amissions or go corrections. The determination of the grade is at the sole discretion of the COTR,	4. Exceptional - Accurate, grammatically correct and without misspellings. All required elements exist. EPA needs are met without modification. Completed on time or ahead of schedule.	Subtask 2.2,	Systems Requirement Specification, System/Database Design Document. FPA's User Guide, EPA Administrator's Guide	Report positive or negative on performance report
			3. L L O	3:Good. Minor inaccuracy, grammatically correct and without misspellings. Content is complete. Minor modifications are required. Completed on time.			
				2:Marginal- Inaccurate content, multiple grammatical errors and misspellings. Flements are missing. Work requires some motification before meeting FPA needs. Completed behind schockit.			,
				1:Poor - Product requires substantial modification to meet EPA needs. Completed substantially behind schedule or not completed.			٠
Software Code (Including XML Schemas, configuration parameters)	Provide defect-free software.	User Acceptance teating for pre- production code	The number of severe and non-	Any development or maintenance release turned over for acceptance glesting shall have zero severe defects and less than 5 non-severe defects.	Subtask 2-2, Sublask 2-3	Delivered Code	Rework done at no cost to EPA
		Random sampling of change requests from the change request log for production code.					Þ.

OTAQ Compliance Information Services Performance Metrics

	Help Desk	System/Database Administration	Deliverable Type
Timely response time Accurate handling of requests	100% Customer Satisfaction	Provide continuous aperations of the Verify EPA Interface (backend).	Performance Objective
Customer Satisfaction Surveys	Inspection of Help Desk reports	Review EPA's Incident and change log, Review System log	Surveillance Method
% of request responded to or roted within 60 minutes of submission to the help desk by phone or email during coro business hours % of end-user requist (requiring more than 1 business day to resolve receiving daily updates % of issues resolved witing 2 business days of studies of day updates resolved witing 2 business days of submission of request for service % of customer satisfaction surveys rated an averoverall score of 4.0 or higher (scale of 0.5 with 5 being the highest	Compare the number of incoming requests request against the requests resolved and/or passed on	The number and length of outages	Performance Measure
		On a munthly basis, the availability shall be 98 percent during the hours 8:00AM to 5:00PM on normal business days. There shall be one 2-hour maintenance outage scheduled monthly.	Performance Standard
	Subtask 2-6	Sublask 2-5	Subtasks
	Help Desk Service	System/Database Administration	Deliverable/Service Affected by Incentive
	Report positive or negative on performance report	Report positive or negative on performance report	Incentive